

2023 EPIC Symposium Agenda

Summary:

With an unprecedented state climate budget and an infusion of federal incentives, California is rapidly transitioning to a clean, resilient, and inclusive energy economy. As a foundation for this transition, the state is continuing its investment through EPIC – the Electric Program Investment Charge – and other innovation programs, bringing new energy products and services to market, driving technology performance and cost improvements, and expanding opportunities to all Californians.

Join us to learn how EPIC is helping catalyze California's equitable, zero-carbon, and climate-resilient energy future.

The annual EPIC Symposium brings together leading policymakers, energy researchers, and technology developers, including recipients of EPIC grants, to spotlight the latest clean energy technologies being deployed in the state. This year's virtual event offers engaging conversations with top government and private sector leaders focused on the recent state and federal investments advancing the development and deployment of new clean energy technologies. Gain insight into how these technologies rapidly expand the construction of new long duration energy storage, improve energy efficiency in buildings, accelerate the rollout of electric vehicle infrastructure, improve grid resiliency and flexibility, and more! Speakers will also highlight how these innovations specifically benefit and uplift under-resourced communities. Energy visionaries will give a behind-the-scenes look at emerging technologies and commercialization challenges and offer insights and strategies to overcome those barriers by using California's premier clean energy entrepreneurship ecosystem. This will be a valuable opportunity to connect with industry thought leaders, foster new partnerships, and explore future endeavors to bring critical energy technologies to market.

Participate in this year's symposium to discover how EPIC is pioneering energy innovations and forging a brighter future for California!

EPIC is funded by California utility customers under the auspices of the California Public Utilities Commission.

Day 1: Tuesday - October 3, 2023

Time	Session Title and Description
9:00 – 9:15 AM	WELCOME AND INTRODUCTORY REMARKS
9:15 – 10:00 AM	LIVING ROOM CHAT: INVESTMENTS AT WORK: BUILDING CALIFORNIA'S CLEAN ENERGY FUTURE While the economic and political landscape has shifted significantly in the past year, both the State of California and the Federal Government have been able to maintain most of their unprecedented commitments to scaling the development and deployment of clean energy technologies to fight climate change. Join Chair Hochschild as he talks with top leadership about the current state of public investment in California and how the EPIC program and other key innovation initiatives are helping accelerate the transition to a safe, reliable, and affordable clean energy future.
10:00 – 10:10 AM	TRANSITION – VIDEO BREAK Video showcase of EPIC recipient projects.
10:10 – 11:00AM	PLENARY SESSION: CATALYZING INNOVATION THROUGH THE EPIC ENTREPRENEURIAL ECOSYSTEM Since its outset in 2012, EPIC has invested more than \$230 million toward the clean energy Entrepreneurial Ecosystem. This investment has helped leverage, align, and expand California's existing innovation networks to build a more interconnected and inclusive statewide ecosystem and bring innovations to market. Companies in this portfolio have commercialized more than 70 technologies and raised more than \$10 billion in private investment. This session will highlight the different subprograms within EPIC -- including CalSEED, CalTestBed, BRIDGE, and RAMP -- that assist companies with technologies at different technology readiness levels.
11 – 11:30AM	TRANSITION – VIDEO BREAK Video showcase of EPIC recipient projects.
11:30 AM – 1:00 PM	LUNCH AND VIRTUAL EXHIBIT HALL

1:00 – 2:00 PM	BREAKOUT SESSION 1.1: DEMOCRATIZING ELECTRIFICATION (Affordability) Electrification is a key strategy for achieving the state’s energy decarbonization goals. This session will highlight new technology innovations that are reducing the costs for customers to electrify.	BREAKOUT SESSION 1.2: GETTING TO 7,000 MW OF LOAD FLEXIBILITY (Reliability) In May 2023, the California set a new goal enabling the rapid reduction of 7,000 megawatts (MW) of electricity during times of grid stress. This session covers new technologies that improve the accuracy of predictions about grid stress and facilitate grid flexibility in battery storage, buildings, and electric vehicles.	BREAKOUT SESSION 1.3: IMPROVING SAFETY IN BATTERY STORAGE (Safety) Increasing battery storage capacity at a rapid rate is a high priority for the state to help address the duck curve, enhance reliability, and lower cost as we move to 100% clean electricity. Improving battery storage safety is critical to maintain momentum on building additional battery capacity. Come learn about the EPIC investments in battery components and manufacturing that are advancing safety.
Day 2: Wednesday - October 4, 2023			
Time	Session Title and Description		
9:00 – 9:15 AM	WELCOME AND INTRODUCTORY REMARKS		
9:15 – 10:00 AM	PLENARY SESSION 2.1: PARTNERSHIP BETWEEN CALIFORNIA ENERGY COMMISSION AND U.S. ADVANCED RESEARCH PROJECTS AGENCY-ENERGY Since the EPIC Program’s inception in 2012, the California Energy Commission (CEC) and Advanced Research Projects Agency-Energy (ARPA-E) have coordinated funding and information sharing, resulting in more than \$160 million in funding to more than 30 California companies, attracting more than \$1.7 billion in private investment to the state, and creating more than 1,000 new jobs. In May 2023, ARPA-E and the CEC solidified this partnership by signing a Memorandum of Understanding (MOU), identifying priority areas of cooperation and methods to pursue common objectives to advance technologies that reduce energy costs, enhance grid reliability and resiliency, and mitigate environmental impacts of how we generate, deliver, and use energy. This session will discuss these priority areas and common objectives and highlight success stories from the ongoing partnership.		
10:00 – 10:10 AM	TRANSITION – VIDEO BREAK Video showcase of EPIC recipient projects.		

10:10 – 11AM	PLENARY SESSION 2.2: PROMOTING SCALABLE AND MEANINGFUL IMPACTS WITH ENVIRONMENTAL JUSTICE COMMUNITIES The CPUC and CEC are committed to ensuring all Californians benefit from clean energy research. Consistent with AB 523 (Reyes, 2017) and CPUC guidance, the CEC has prioritized energy equity in its research programs to ensure that disadvantaged and low-income communities and California Native American Tribes benefit from clean energy innovations, with 70 percent of EPIC demonstration and deployment funds invested in under-resourced communities. This panel will explore California’s energy equity policy priorities and how EPIC research investments are providing support. Speakers will highlight lessons learned and identify remaining barriers for communities that are most impacted by pollution and climate-related events.		
11:00 – 11:30 AM	TRANSITION – VIDEO BREAK Video showcase of EPIC recipient projects.		
11:30 AM – 1:00 PM	LUNCH AND VIRTUAL EXHIBIT HALL		
1:00 – 2:00 PM	BREAKOUT SESSION 2.1: BUILDING ENERGY EFFICIENCY AND IMPROVING AFFORDABILITY (Affordability) Advancements in building envelopes and air conditioning, among other technologies, are driving efficiency improvements in the buildings sector. In this breakout session, we will hear about how technology innovations are supporting energy affordability and making efficiency technologies more accessible.	BREAKOUT SESSION 2.2: WILDFIRE PREVENTION & RESILIENCE (Safety, Reliability) Climate change continues to drive extreme weather events in the West, with an increased frequency and severity of heat waves and wildfires, challenging grid reliability. In this breakout session, learn about how EPIC-funded decision-support tools and resilience-enhancing technologies are helping respond to climate impacts in the electricity sector.	2.3: ELECTRIC VEHICLE INFRASTRUCTURE INNOVATIONS (Reliability) In 2023, California hit a major milestone: More than 1.5 million zero-emission vehicles were “on the road” in the Golden State. These vehicles represent new potential flexible resources. In this breakout session, we will hear from companies partly funded by EPIC’s \$86 million investment in zero-emission transportation to develop innovations in bidirectional charging, medium- and heavy-duty vehicle charging, and residential EV charging.